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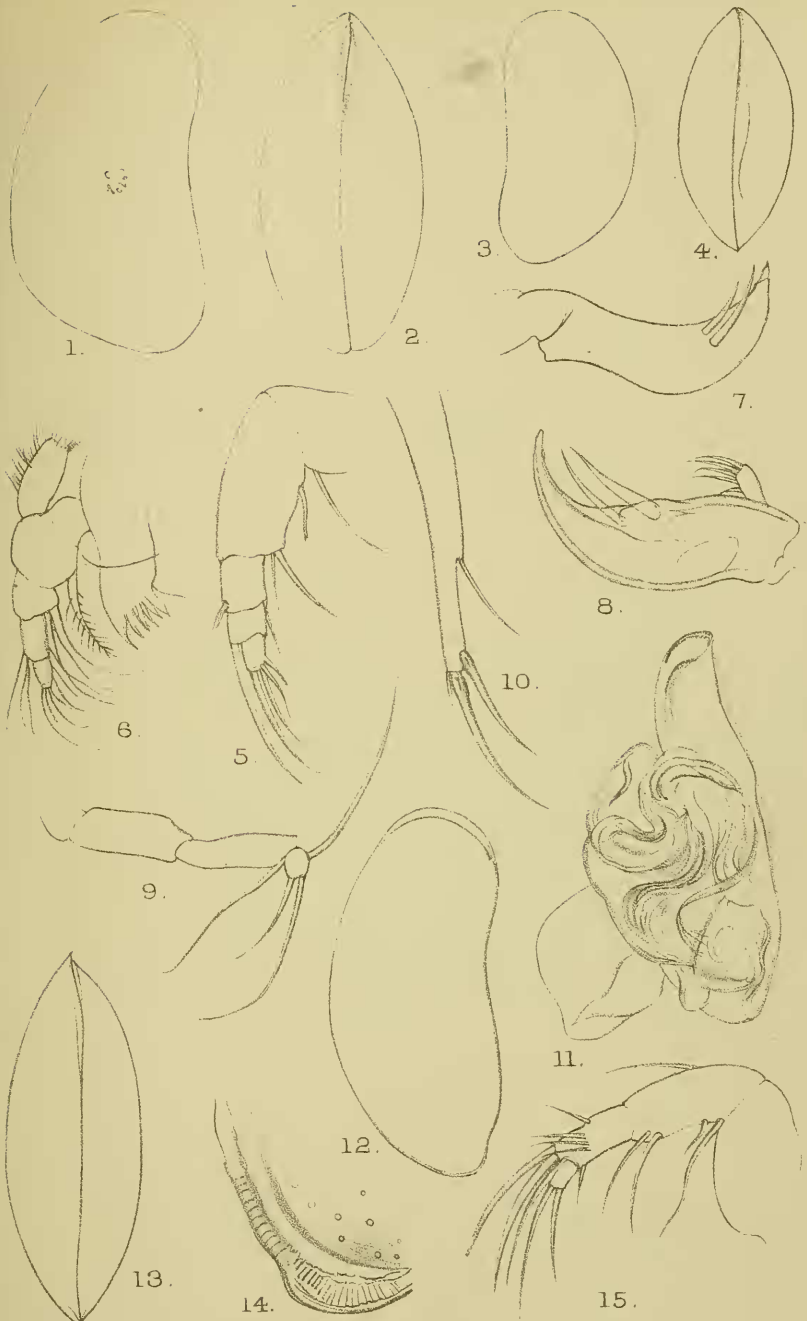
4. A Revision of the British Species of Ostracod Crustacea belonging to the Subfamilies *Candoninae* and *Herpetocypridinae*. By G. STEWARDSON BRADY, M.D., LL.D., D.Sc., F.R.S., C.M.Z.S. (With Note on a Parasitic Worm, by Miss M. V. LEBOUR, M.Sc.)

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(Plates XIX.—XXX.*)

The species dealt with in this paper are separated from most other Cyprididae by the absence, or the very scanty development, of setae on the posterior antennae, together with a full development of the caudal rami. When a setose antennal fascicle is present it never reaches further than the extremities of the terminal claws, and usually falls much short of them, so that in all cases the animal is destitute of swimming capacity. The species may

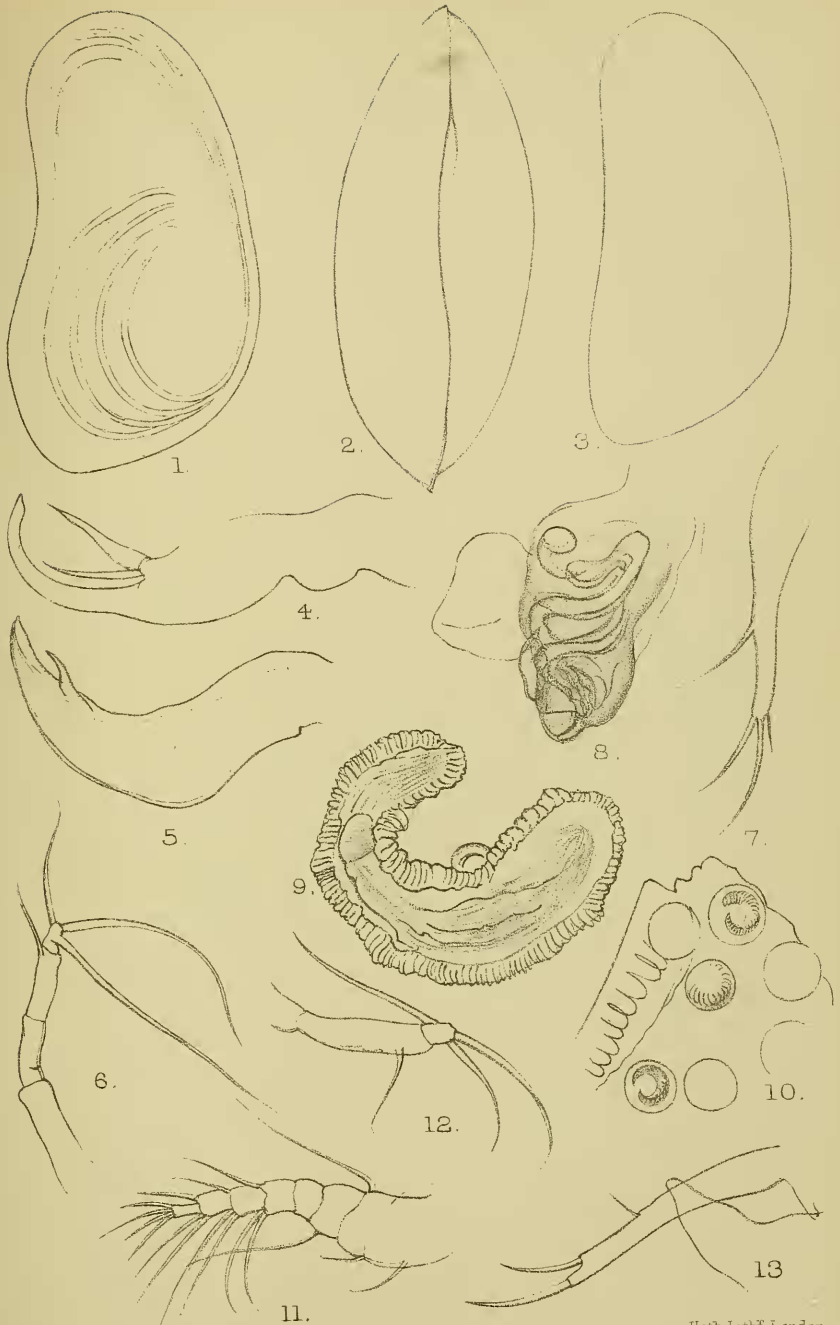
* For explanation of the Plates see pp. 217–220.



G. S. B. del^t

Huth Lith^r London.

1-11. CANDONA CANDIDA.
12-15. CANDONA CAUDATA.



G. S. B. del^r

Hutch, Lith^r London

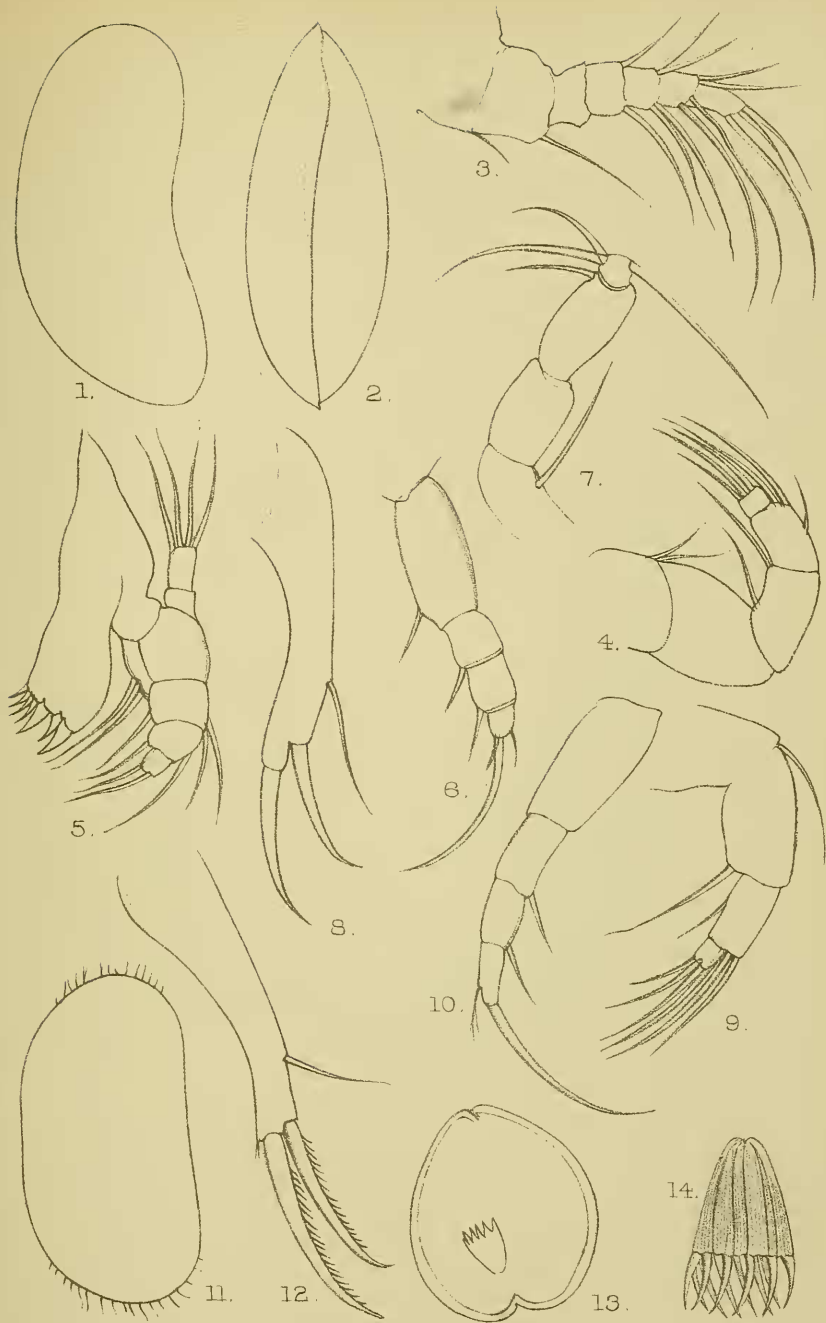
1-10. CANDONA ANGULATA.
11-13. CANDONA CAUDATA.



G. S. B. del^s

Huth, Lith^r London.

1-8. CANDONA NEGLECTA.
9-14. CANDONA SILIQUOSA.



G. S. B. del^o

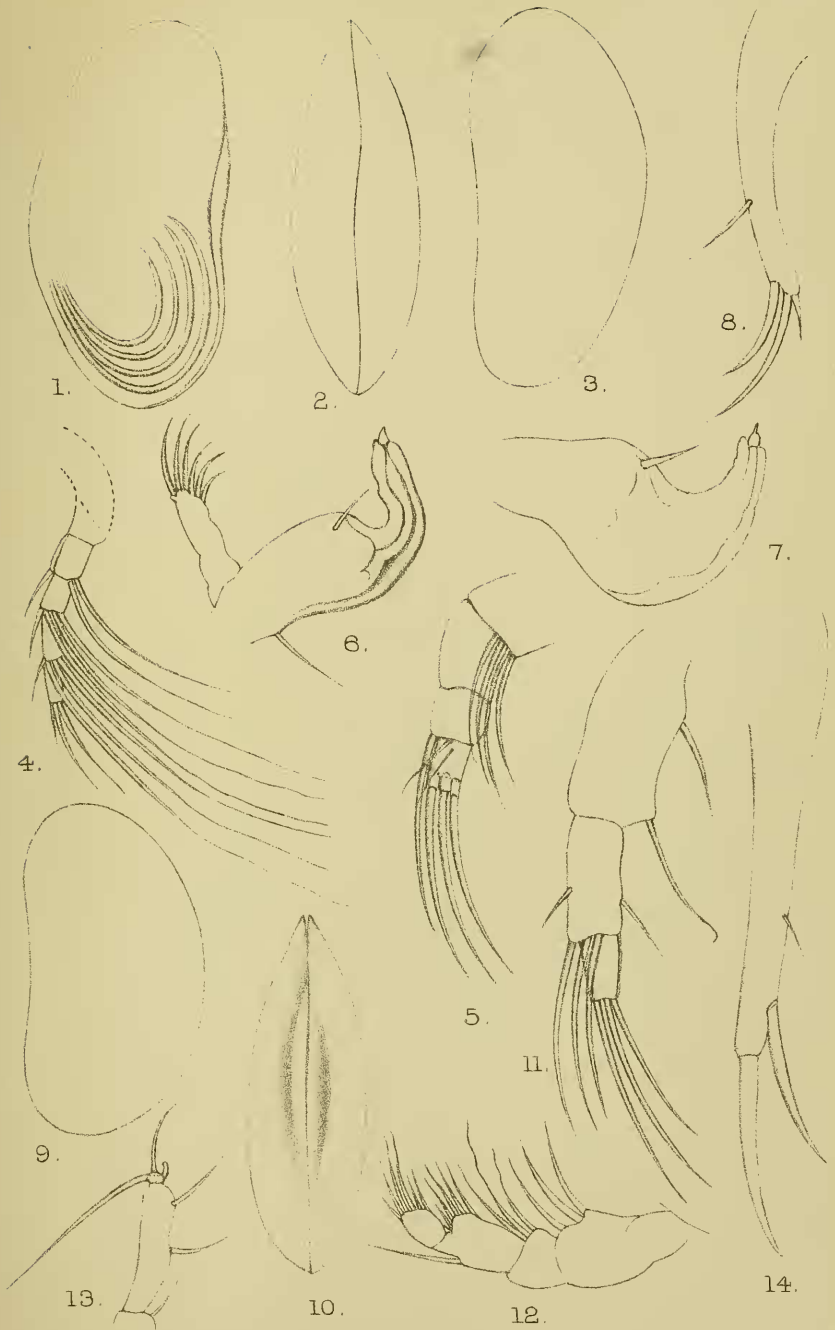
Hugh Lith^o London.

1-8. CANDONA ELONGATA.

9-10. CANDONA SILIQUOSA.

11, 12. CANDONA STAGNALIS.

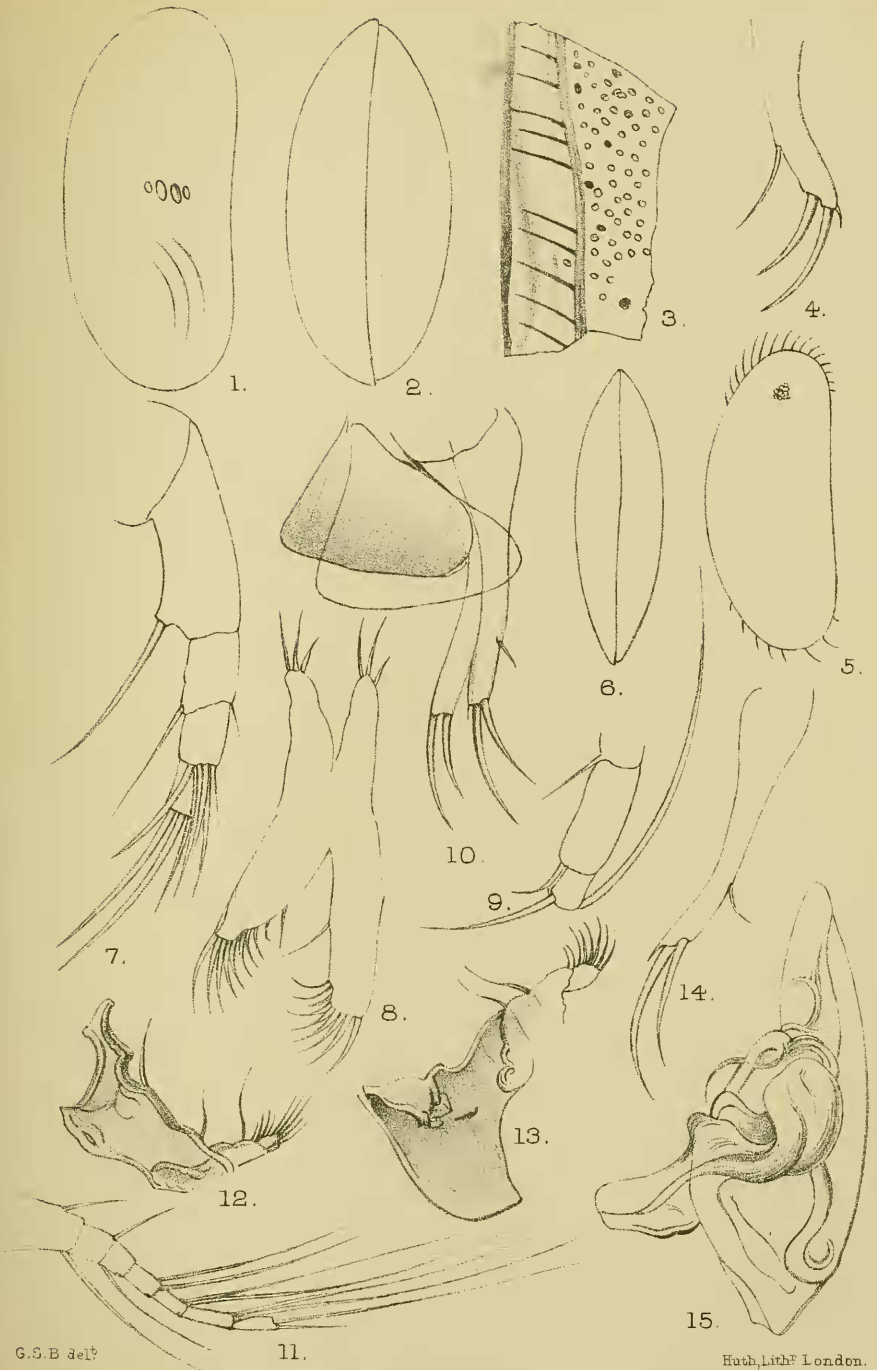
13, 14. SCOLEX OF TÆNIA.



G.S.B. del.

Huth, Lith^r London

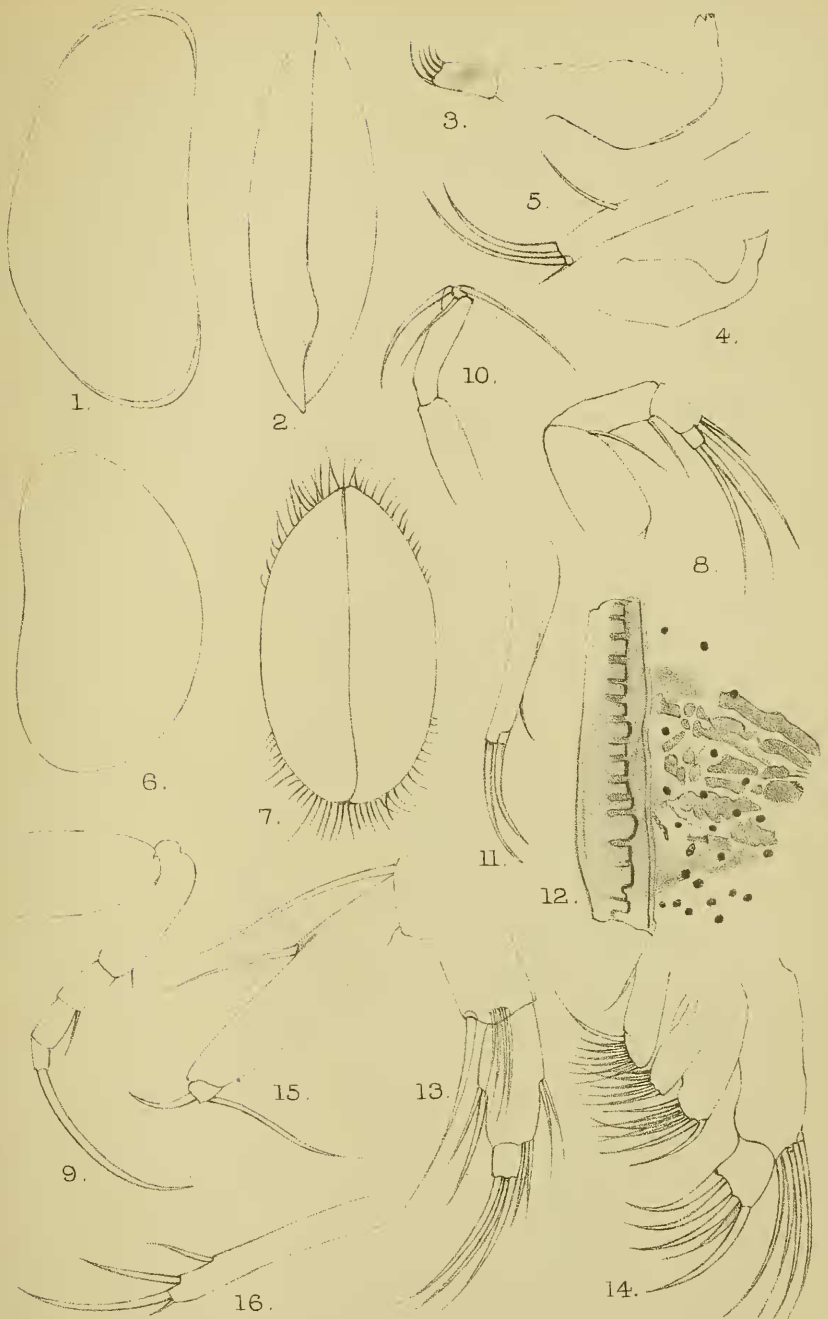
1-8. CANDONA PROTZI.
9-14. CANDONA CALEDONIÆ.



G. S. B. del^d

Huth, Lith^d London.

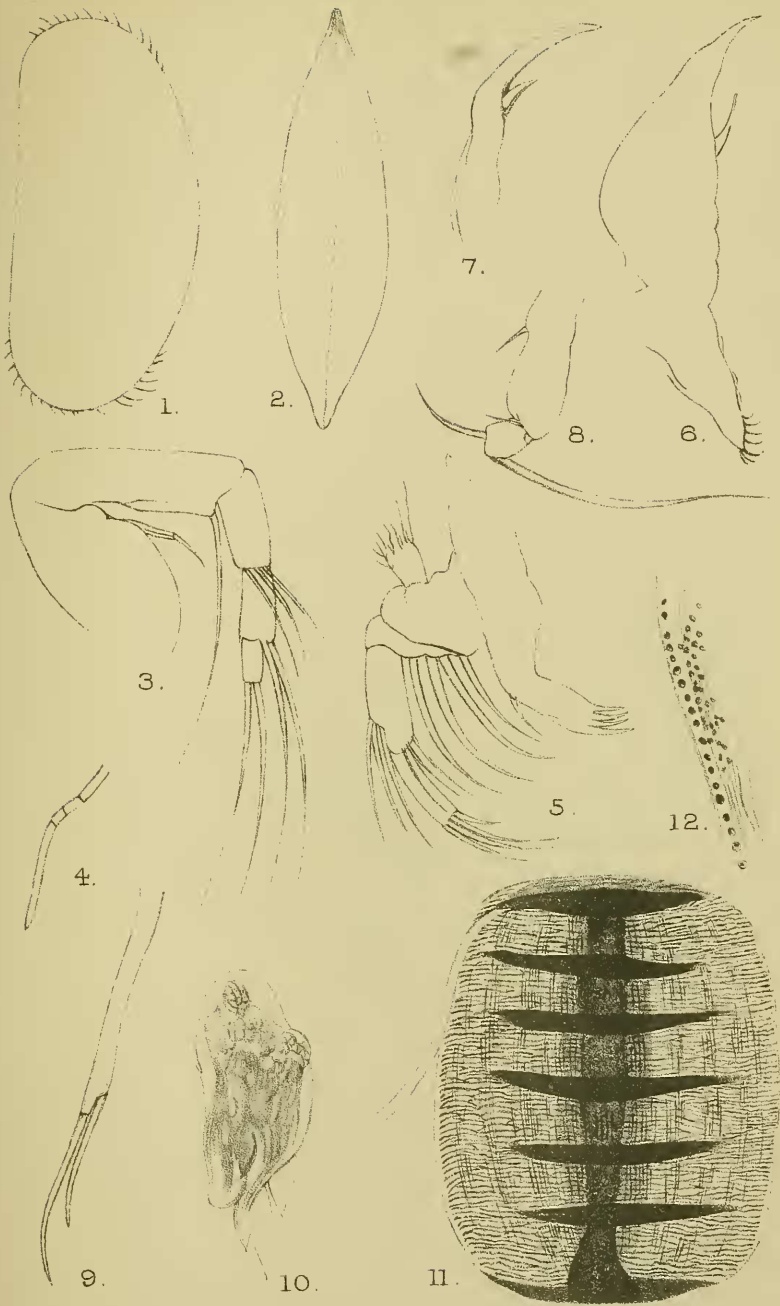
1-4. CANDONA LACTEA.
5-10. CANDONA FRAGILIS.
11-15. CANDONA FABÆFORMIS.



S.S.B. del.

Hath, Lith. London.

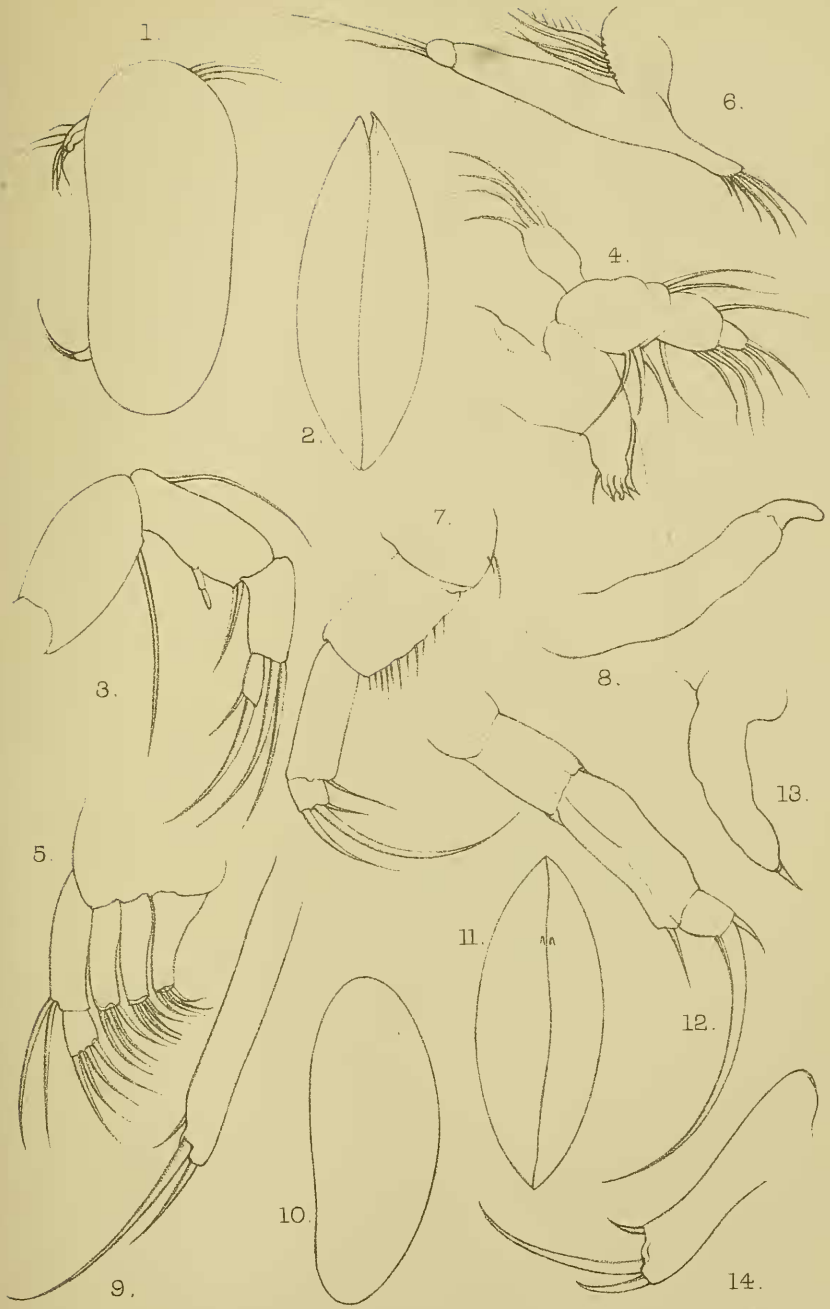
1-5. CANDONA HYALINA.
6-12. CANDONA BREVIS.
13-16. PRIONOCYPRIS SERRATA.



G S B. del^t

Huth, Lith^r London.

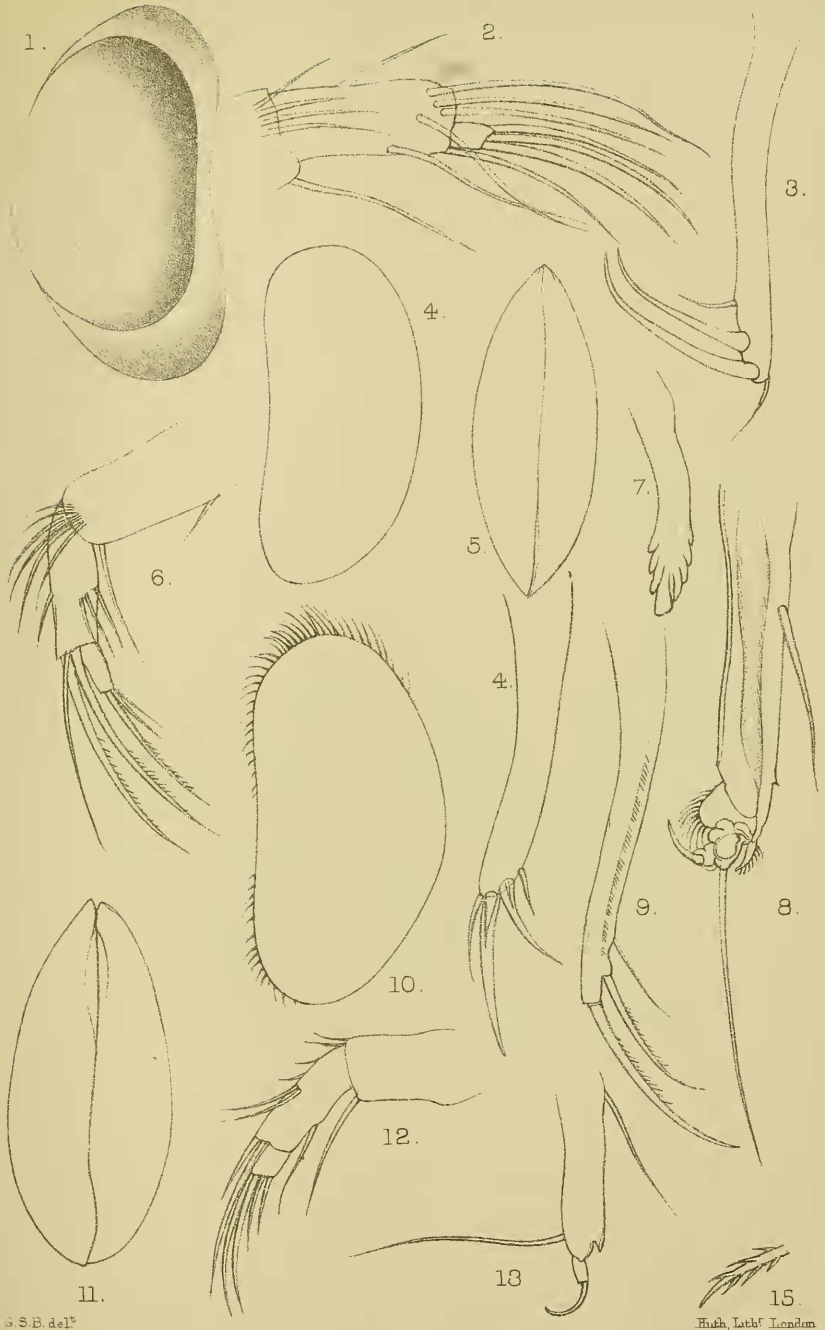
CANDONOPSIS SCOURFIELDI.



G.S.B. del.

Hutch, Litho London

1-9. SIPHLOCANDONA SIMILIS.
 10-14. SIPHLOCANDONA NORMANI.



S.S.B. del^o

Hubb, Lith^r London

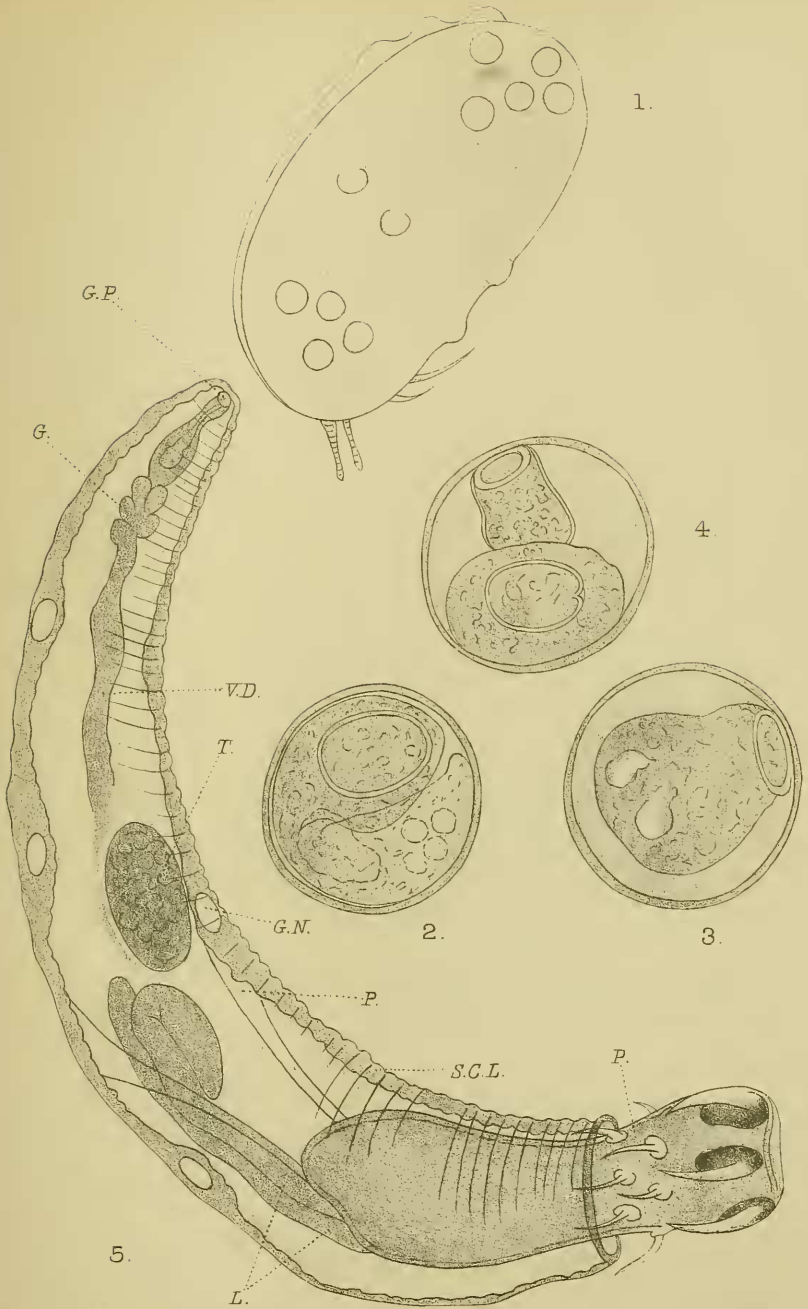
1-3. PRIONOCYPRIS TUMEFAC^tA.
 4-9. HERPETOCYPRIS STRIGATA.
 10-15. ILYODROMUS ROBERTSONI.



G. S. B. del^t

Huth Lith^r London.

1 - 7a. HERPETOCYPRIS CHEVREUXII.
8 - 11. ILYODROMUS OLIVACEUS.
12. ILYODROMUS ROBERTSONI.



M.V. Lebour, del.

Huth, Lith^r London

WORMS PARASITIC IN CANDONA ANGULATA.

be grouped under two families or subfamilies, *Candoninae* and *Herpetocypridinae*, broadly separable from each other by the distinctly bisexual character of the former, with accompanying sexual reproduction, and the non-sexual (or hermaphroditic) character of the latter with a constant "parthenogenetic" reproduction. It is to be remembered, however, that in some cases which at one time were believed to constitute examples of "parthenogenetic" reproduction, males have been found to exist; and it is possible that the existence of that sex may hereafter be demonstrated in the case of other species. The number of species hitherto recognized as natives of the British Islands is only twenty-nine. This number will doubtless be considerably increased when various areas, at present but little known, have been thoroughly examined. The only parts of the country which can be said to have received anything like a complete investigation are:—(1) the southern counties of Scotland, which have been most diligently overhauled by Dr. Thomas Scott of the "Fishery Board for Scotland" and the late Dr. David Robertson of Cumbrae; (2) the counties of Northumberland and Durham and—less completely—Cumberland and Westmorland, where the Rev. Dr. Norman and myself have worked for many years; (3) the Fen District of East Anglia including the Norfolk Broads and the Cambridgeshire Fens, which have been fairly well investigated by Dr. Robertson and myself, and more recently by Mr. Robert Gurney and others. But even in these well-worked districts, much, no doubt, remains to reward future investigators.* The species here recorded are as follows:—

Candoninae.

<p><i>Candona candida</i> O. F. Müller. „ <i>angulata</i> G. W. Müller. „ <i>neglecta</i> G. O. Sars. „ <i>caudata</i> Kaufmann. „ <i>siliquosa</i> G. S. Brady. „ <i>elongata</i> Brady & Norman. „ <i>protzi</i> Hartwig. „ <i>zenckeri</i> G. O. Sars. „ <i>stagnalis</i> G. O. Sars. „ <i>caledoniæ</i> G. S. Brady. „ <i>lactea</i> Baird.</p>	<p><i>Candona fragilis</i> Hartwig. „ <i>fabieformis</i> Fischer. „ <i>hyalina</i> Brady & Robertson. „ <i>brevis</i> G. W. Müller. „ <i>pubescens</i> Koch. „ <i>rostrata</i> Brady & Norman. „ <i>eupleetella</i> Robertson. <i>Candonopsis kingsleii</i> Br. & Robertson. „ <i>scourfieldi</i> G. S. Brady. <i>Siphlocandona similis</i> Baird. „ <i>normanæ</i> G. S. Brady.</p>
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Herpetocypridinae.

<p><i>Herpetocypris reptans</i> Baird. „ <i>chevreuxii</i> G. O. Sars. „ <i>strigata</i> O. F. Müller. <i>Prionocypris serrata</i> Norman.</p>	<p><i>Prionocypris tumefacta</i> Br. & Robertson. <i>Ilydromus robertsoni</i> Br. & Norm. „ <i>olivaceus</i> Br. & Norm.</p>
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* The differences between so-called species are in many cases so small, and withal so inconstant, that the diagnosis becomes a matter of considerable difficulty. I have therefore attempted in this paper to place such species on a rather more stable footing—being at the same time quite aware that the attempt is only partially successful.

Fam. CYPRIDIDÆ.

Subfam. 1. *Candoninae*.

Posterior antennæ destitute of swimming setæ.

Last foot with three unequal end setæ. Caudal rami well developed. Sexes distinct.

Subfam. 2. *Herpetocypridinee*.

Setæ of the posterior antennæ not reaching beyond the extremities of the apical claws. First segment of maxilla with two smooth or toothed spines. Last pair of feet forcipate, with a curved claw. Caudal rami normal. Monœcious.

Subfam. CANDONINÆ.

Genus CANDONA Baird.

CANDONA CANDIDA O. F. Müller (in part). (Plate XIX. figs. 1-11.)
(Syn. *Candona lucens* Baird.)

1785. *Cypris candida* Müller, Entomostraca, p. 62, tab. vi. figs. 7-9.

1866. *Candona candida* Brady, (1)* p. 383, pl. xxv. figs. 1-5.

1889. *Candona candida* Brady & Norman (in part), (2) Part i. p. 98, pl. x. figs. 14-17.

1891. ?*Candona candida* Vávra, (6) p. 48, fig. 14. 1-10.

1900. ?*Candona candida* G. W. Müller, (5) p. 15, pl. ii. figs. 1-3, 7-12.

1900. *Candona candida*, Kaufmann, (4) p. 379, pl. xxviii. figs. 10-13, pl. xxviii. figs. 18-25.

This is probably the commonest and most widely distributed form of the fresh-water *Candonæ*, but near the sea it seems generally to give place to *C. angulata* or *C. neglecta*, preferring the purer water of lakes, ponds, and streams.

The drawings here given (figs. 1-11) are from specimens taken in a pool above high-water mark at Penmaenmawr, which, however, would not be quite inaccessible to saline spray during storms. These agree closely with the descriptions and figures of Herr Kaufmann taken from Swiss specimens, and may I think fairly be taken to represent the typical form of *C. candida*. But the prehensile claws of the second pair of maxillæ as figured by G. W. Müller and Vávra differ so much from those of the form now under consideration, that I doubt whether they may not belong to some other species. The form referred to by Brady and Norman as var. *tumida* differs scarcely at all from that here taken as typical *C. candida*.

The shell of the male, as seen from the side, is more elongated than that of the female, and is more fully rounded posteriorly and somewhat less tumid when seen dorsally.

Shell smooth, and devoid of reticulated sculpture; colour white

* The numbers in brackets refer to the corresponding numbers in the list of papers given on p. 216.